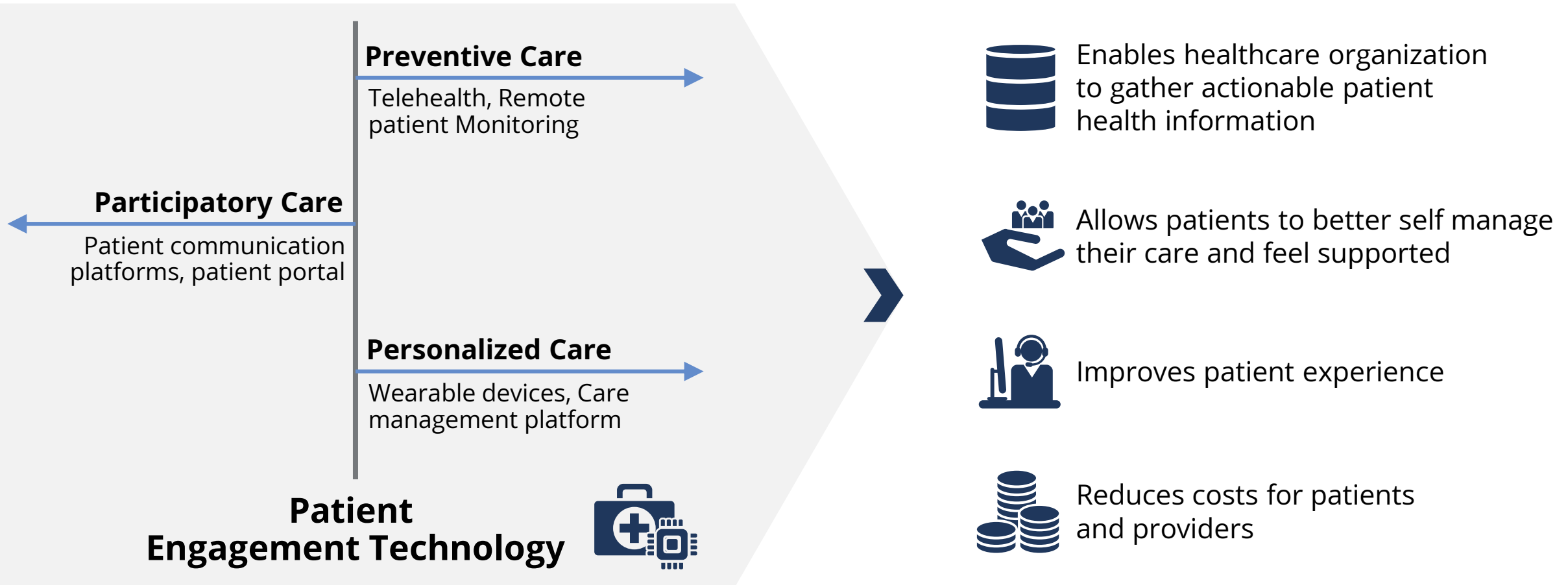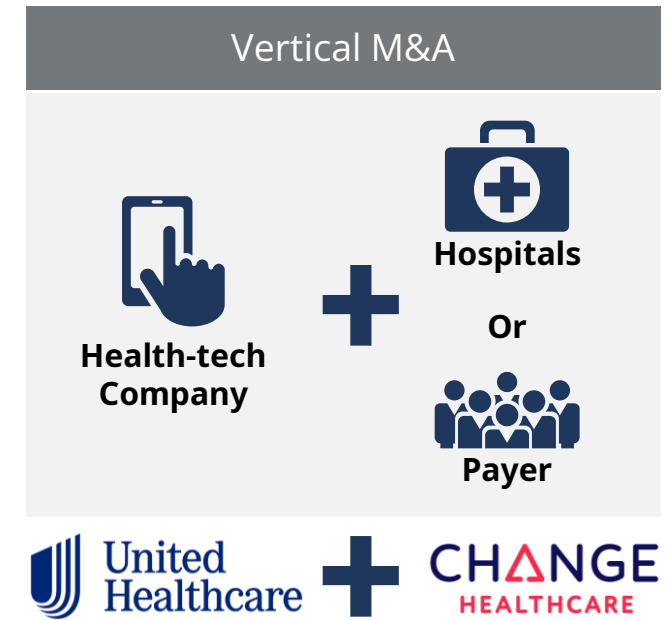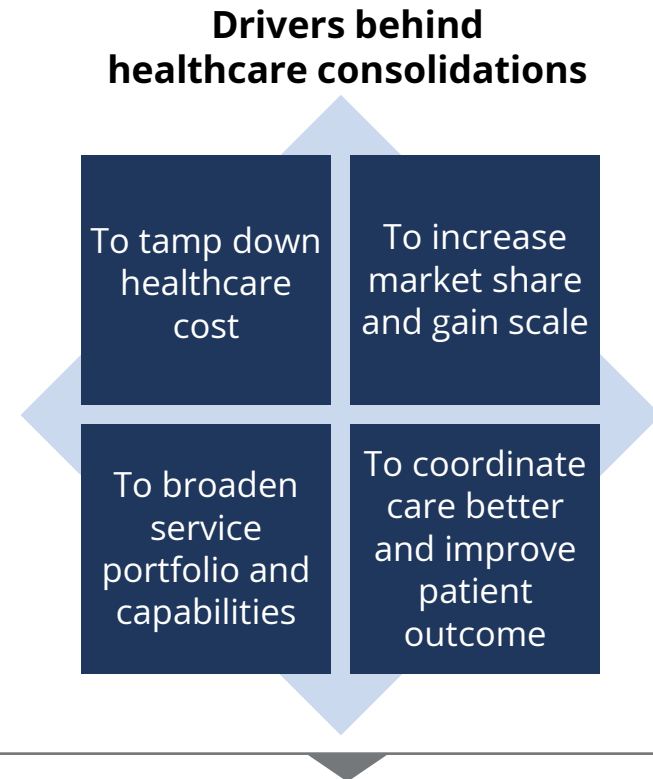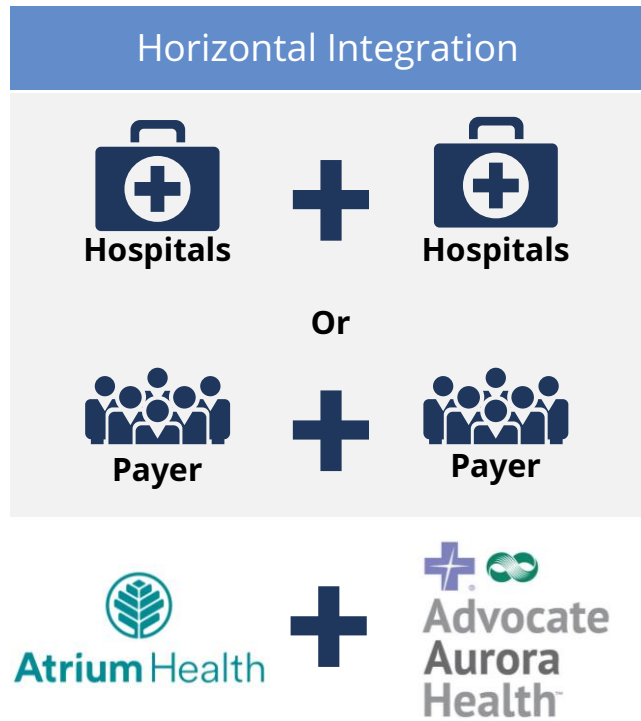# Healthcare Trends

March 06, 2023

Industry Shifts Towards Preventive, Personalized, and Participatory Care, Enabled by Patient Engagement Technology

Healthcare leaders are harnessing the power of technology to improve access to care, delivery of care, and healthcare support.

Preventive Care

Telehealth, Remote patient Monitoring

Participatory Care

Patient communication platforms, patient portal

Personalized Care

Wearable devices, Care management platform

Patient Engagement Technology

- Enables healthcare organization to gather actionable patient health information
- Allows patients to better self manage their care and feel supported
- Improves patient experience
- Reduces costs for patients and providers

Source: ISG Research

Horizontal and Vertical Integration of Key Market Players Continues

Horizontal Integration

Hospitals **+** Hospitals

Or

Payer **+** Payer

Atrium Health **+** Advocate Aurora Health

Drivers behind healthcare consolidations

- To tamp down healthcare cost
- To increase market share and gain scale
- To broaden service portfolio and capabilities
- To coordinate care better and improve patient outcome

Vertical M&A

Health-tech Company **+** Hospitals

Or

Payer

United Healthcare **+** CHANGE HEALTHCARE

Impact on Healthcare

- Care efficiency increases due to coordinated systems.
- Reduced healthcare as large hospital systems have bargaining power with insurers and pharmaceutical companies.
- Highly consolidated market reduces access to health care through hospital closures and higher prices.

Source: ISG Research

Non-traditional Players are Transforming Primary Care Delivery

Current Market Situation

Increased Pressure on Existing Care Models

- Increased cost awareness
- Consumerism
- Digital adoption
- Physician shortage

- Sites of care are moving from clinics to homes, retailers, and digital platforms.
- Retail giants like CVS, Walgreens, and Walmart making inroads into the primary care space.

New primary care models

Benefits
- Higher ease of accessibility for patients
- Reduced wait time
- Relatively lesser costs than hospital admission

Recent Development

Walgreens
- Walgreen's VillageMD unit acquired Summit Health-CityMD to expand Walgreen's reach into primary, specialty and urgent care.

CVS Health
- CVS Health plans to acquire Oak Street Health for $10.6B for extending its primary and value-based care footprint.
- In September 2022, CVS Health acquired Signify Health, a healthcare platform that uses analytics and technology to pair clinicians with patients for home-based visits.

Walmart
- Walmart acquired telehealth company MeMD to add nationwide virtual care options across primary care, urgent care and behavioral health to its clinics' service portfolio.
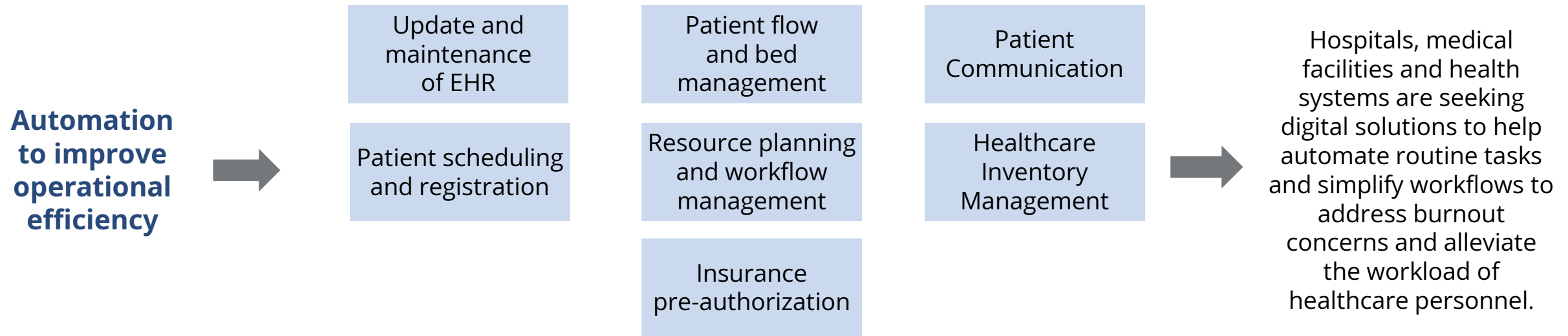
DG
- Dollar General is piloting mobile clinics at three Tennessee stores in partnership with mobile health provider DocGo.

Source: ISG Research

Demand for Operational and Clinical Efficiency Solutions on Rise, Driven by Labor Shortage

The World Health Organization estimates that by 2035
there will be a global deficit of 12.9M skilled healthcare professionals.

Automation to improve operational efficiency →

Update and maintenance of EHR	Patient flow and bed management	Patient Communication
Patient scheduling and registration	Resource planning and workflow management	Healthcare Inventory Management
	Insurance pre-authorization	

→ Hospitals, medical facilities and health systems are seeking digital solutions to help automate routine tasks and simplify workflows to address burnout concerns and alleviate the workload of healthcare personnel.

Notable Development

- GE HealthCare and Apprise Health Insights partnered to launch the U.S.' first statewide automated hospital bed management solution in Oregon.
- Automation Anywhere launched a new cloud-based Epic Fast Healthcare Interoperability Resources (FHIR) API Bot to automate access to electronic health records (EHR) for Epic Systems, one of the largest EHR vendors in the U.S.

Source: ISG Research

Healthcare Players are Using Real-time Data to Improve Outcomes

Use of real-time data varies across ecosystem players

Payers
- Forecasting, Claims predictions
- Fraud detection
- Reduce readmission
- Streamline customer experience
- Value-based reimbursement

Providers
- Personalized care
- Identify at-risk patients
- Resource allocation
- Predict outcomes

Medtech companies
- Streamline payer and provider workflow
- Identify opportunities to generate revenue
- Optimize care delivery

Advantages of real-time data

Streamlined patient experience	Enhanced remote monitoring capabilities
Efficient resource utilization	Improved disease management
Timely diagnosis and care	Decreased costs

- MedTronic uses InPen, a smart insulin pen on real-world glycemic and insulin dosing outcomes in individuals with poorly controlled diabetes which monitors patients in real-time.

- GE Healthcare and AMC Health collaborated to offer remote patient monitoring to patients with chronic and post-acute care in the home by leveraging real-time data.

Source: ISG Research

IoMT Devices, Enhanced by 5G, Open New Opportunities for Holistic Patient Care

5G offers immense possibilities for healthcare players to move to holistic data-driven personalized care, optimize resource utilization, offer care delivery convenience, and achieve increased patient value.

IoMT Devices

- Consumer-grade wearables
- Remote patient monitoring (RPM) devices
- Personal Emergency Response Systems (PERS)
- Smart pills
- Point-of-care devices and kiosks
- In-clinic monitors
- In-hospital devices

5G

High-speed data transfer rate, low latency connectivity and capacity, high bandwidth

Connected Healthcare Ecosystem

- Real-time Remote patient monitoring
- Connected ambulance
- HD virtual consultations
- Video-enabled prescription management
- Remote expert for collaboration in surgery
- AR/VR training and education

Key Development

Verizon's Business unit announced the launch of BlueJeans Telehealth, a solution to aid healthcare providers in delivering video telehealth experiences. BlueJeans Telehealth benefits from 5G's bandwidth and latency to deliver a higher-quality, jitter-free video stream to enhance the patient experience and aid in diagnosis.

Source: ISG Research

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Data Security becomes a Top Priority across Healthcare Ecosystem

Shift towards digitalization has left healthcare industry overexposed to cyber risks and attacks.

Cybersecurity Challenges Faced by the Healthcare Industry

Vulnerability of Legacy Systems

Data Breaches

Insecure Medical Devices and Equipment

Ransomware and Malware

Distributed Denial of Service (DDoS)

Phishing

Fragmented Security Architecture

Healthcare players are increasing efforts to reduce security risks

Healthcare providers are partnering with tech companies to protect patient data

Mount Sinai Health System collaborated with Sandbox AQ, an enterprise SaaS company leveraging quantum tech and AI, to protect patient records using sophisticated encryption technology

IoMT firms are partnering with cybersecurity companies to develop secured solutions

IoMT cybersecurity company Ordr has announced an expanded partnership with Fortinet, a cybersecurity solutions provider, to deliver advanced security solutions across network-connected IoMT devices.

Healthcare IT providers are collaborating with cybersecurity firms to offer improved risk management solutions

Forescout Technologies, the global leader in automated cybersecurity, partnered with First Health Advisory, a leader in healthcare IT risk management to help organizations mitigate IT, OT and IoMT risk.

Source: ISG Research

Big Tech is Ramping Up Investments in Healthcare Space

Tech giants are targeting niche sectors within the industry.

	amazon	Apple	Google	Microsoft
Focus Area	Amazon is setting up initiatives to transform pharmacy, the medical supply chain, health insurance, and care delivery. The company is also looking to improve operational and clinical efficiencies through its cloud service AWS.	Apple is pushing to turn its consumer products into portable patient health hubs and clinical research tools by to forging partnerships with payers, health systems, and clinical researchers.	Alphabet is leaning on its cloud platform artificial intelligence (AI) to partner with hospital to solve challenges with electronic health record (EHR) interoperability and computing infrastructure.	Microsoft is using its Azure cloud services to enable providers and payers to improve health outcomes and optimize data storage.
Recent Collaborations	Amazon acquired primary care disruptor One Medical in July 2022 for $3.9B.	Apple is looking to beef up its the Apple Watch and iPhone with new health features such as allowing users to store 150 different types of medical information on their Apple products and implementing sensors in the Apple Watch that can detect a hard fall or heart irregularities.	Google partnered with electronic health record (EHR) company Meditech for its CareStudio platform. Google Cloud and Epic also partnered to enable the EHR company's health system customers to migrate to the cloud.	Microsoft partnered with UPMC to provide the health system's clinical analytics team with its computing, AI and machine to help mine clinical and imaging data to create new insights that improve patient care.

Source: ISG Research

Emerging Technology is Shaping the Future of Virtual Care

With the increasing use of the digital front door, remote patient monitoring (RPM), and hospital at home, virtual care is becoming mainstream.

Application

Artificial Intelligence (AI)

- AI-driven care-assistive apps and predictive algorithms are enabling remote screening the diagnostic needs of patients.
- AI-enabled EHRs are aiding providers to improve the interoperability of data and remote patient monitoring.
- AI-powered healthcare chatbots are helping with patient communication and appointment scheduling.

Microsoft and Nuance are working to leverage AI for EHR system.

AR and VR

- AR/VR is enabling virtual real-time diagnosis and health-tracking.
- AR-enhanced telemedicine tools are allowing better diagnostic collaboration among medical professionals.

Telehealth platform XRHealth has AR support that allows clinicians to share the 3D images of their cases during virtual consultations with other professionals.

IoT

- IoT enabled monitoring devices and wearables are assisting healthcare providers to remotely monitor patients' vital signs and send alerts.
- IoT platform are enabling medical device manufacturers and providers to ensure adherence to medical advice.
- IoT devices bring transparency between insurers and customers in the underwriting, pricing, claims handling, and risk assessment processes.
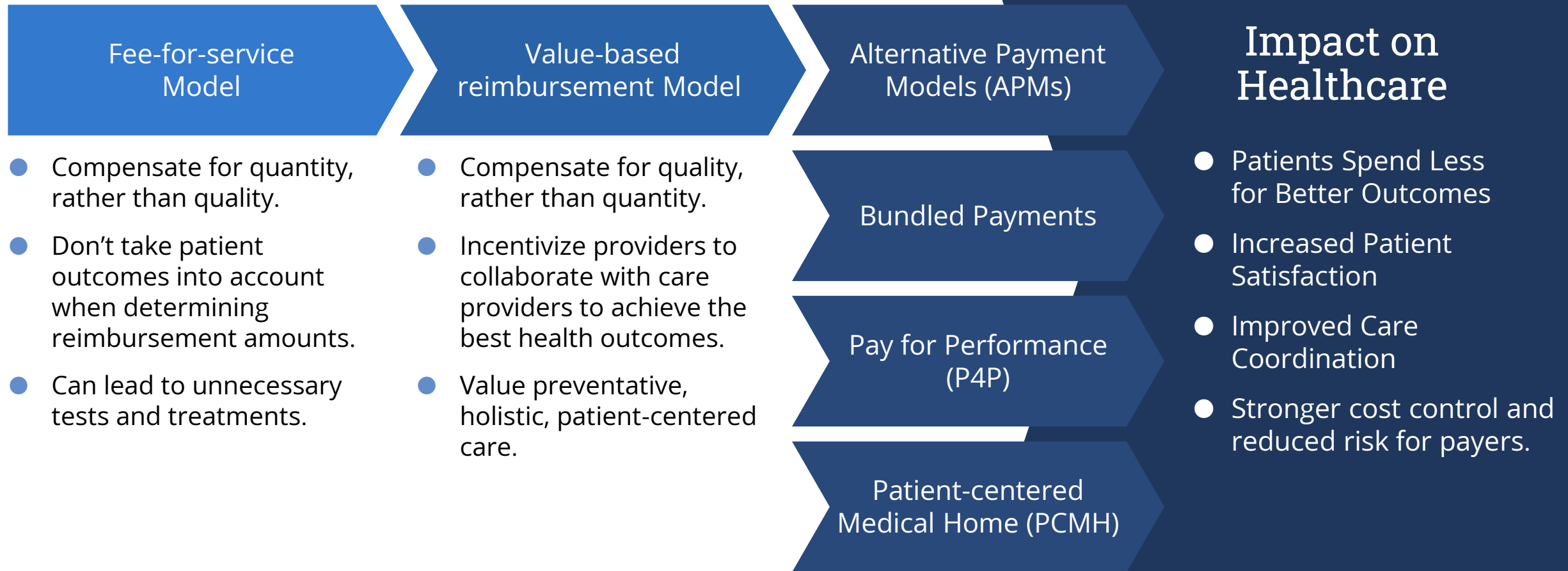
Apple in its Series 4 smart watch has included FDA-approved electrocardiogram (EKG) and addition of a menstrual health monitoring feature.

Source: ISG Research

Changing Payment Models are Impacting Care Dynamics

Healthcare industry is slowly shifting from
fee-for-service model to value-based care (VBC) payment.

Fee-for-service Model

- Compensate for quantity, rather than quality.
- Don't take patient outcomes into account when determining reimbursement amounts.
- Can lead to unnecessary tests and treatments.

Value-based reimbursement Model

- Compensate for quality, rather than quantity.
- Incentivize providers to collaborate with care providers to achieve the best health outcomes.
- Value preventative, holistic, patient-centered care.

Alternative Payment Models (APMs)

Bundled Payments

Pay for Performance (P4P)

Patient-centered Medical Home (PCMH)

Impact on Healthcare

- Patients Spend Less for Better Outcomes
- Increased Patient Satisfaction
- Improved Care Coordination
- Stronger cost control and reduced risk for payers.

Source: ISG Research

Thank You

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